HOSPITAL LENGTH-OF-STAY AND COSTS ASSOCIATED WITH USE AND EARLIER INITIATION OF DROTRECOGIN ALFA (ACTIVATED) IN ADULT PATIENTS WITH THE HIGHEST PROPENSITY OF HAVING SEVERE SEPSIS

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OBJECTIVES: Drotrecogin alfa (activated) (DrotAA) is indicated for adults with severe sepsis (SS) at high risk of death. ICD-9-CM code 995.92 for SS became available in October 2002. The purpose of our study was to determine whether hospital length-of-stay (LOS) and costs differ for adult patients most likely to have SS, depending on whether they received DrotAA.

METHODS: We conducted a retrospective analysis of 2002-2003 hospital discharges from the large Premier Inc Perspective Comparative Database developed for clinical and economic benchmarking. We modeled adult patients’ propensity for having code 995.92 as proxy for likelihood of having SS. Among patients having the highest likelihood of SS, defined as the top 5% of propensity scores, we compared hospital LOS and costs between DrotAA recipients and non-recipients. We also compared LOS and costs stratified on the interval between evident SS and initiation of DrotAA: Same-day, Next-day, Day2+.

RESULTS: Of 218,805 patients, 11,218 met the criterion for highest likelihood of having SS. Whereas 67.2% of these never received DrotAA, 38.3% of DrotAA recipients were Same-day, 31.4% Next-day, and 30.4% Day2+. Hospital LOS was shorter among DrotAA recipients than non-recipients overall (21.0 vs. 22.1 days; p = 0.029). Moreover, for DrotAA patients, hospital LOS shortened as the interval shortened (Same-day 16.6, Next-day 19.2, Day2+ 30.4 days; p < 0.0001). Hospital costs were higher for DrotAA recipients than non-recipients overall ($37,834 vs. $54,145; p = 0.004). However, for DrotAA patients, hospital costs were lower as the interval shortened (Same-day $44,134; Next-day $52,205; Day2+ $86,669; p < 0.0001), consistent with LOS differences. CONCLUSIONS: Most patients with the highest likelihood of having SS never receive DrotAA. Hospital LOS and costs significantly decrease as the treatment interval shortens for DrotAA recipients, although DrotAA recipients have higher average hospital costs than non-recipients overall. Hospital LOS and costs might be reduced through improvements to the appropriate use of DrotAA.

INFECTION—Health Care Use & Policy Studies

A RETROSPECTIVE EVALUATION OF THE MANAGEMENT AND OUTCOMES IN HOSPITALIZED PATIENTS WITH COMMUNITY ACQUIRED PNEUMONIA IN AN INNER-CITY HOSPITAL

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OBJECTIVES: This study evaluated the medical management of patients hospitalized with Community Acquired Pneumonia (CAP) in an inner-city hospital comprising over 90% of Medicare and indigent patients. The goal was to identify opportunities for quality improvement. METHODS: A random sample of patients with a diagnosis of CAP at discharge in 2002 was selected for retrospective chart review. Data was collected based on American Thoracic Society (ATS) criteria. RESULTS: Medical records of 155 patients were reviewed; mortality rate was 4%.